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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,283	11/02/2001	Charles Clark	2001P19665US	1249

7590 04/01/2003

Siemens Corporation
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EXAMINER
KIM, RICHARD H

ART UNIT	PAPER NUMBER
2882	

DATE MAILED: 04/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/053,283	Applicant(s) CLARK ET AL.	
	Examiner Richard H Kim	Art Unit 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5,6,9,10,13 and 14* is/are rejected.

7)☒ Claim(s) *3-4,7-8,11-12,15-16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received

2.☐ Certified copies of the priority documents have been received in Application No. _____

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
4)☐ Interview Summary (PTO-413) Paper No(s) _____
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith et al. (US 6,282,264 B1).

Referring to claim 9, Smith et al. discloses a portal imaging system comprising a radiation delivery apparatus (see Fig. 1, ref. 46); and means for deploying an imaging panel in a first mode to receive radiation from the apparatus below a patient plane and in a second mode at the patient plane (see col. 8, lines 25-48).

Referring to claim 10, Smith et al. discloses a means comprising a vertical drive unit assembly attachable at a mounting cavity to a support (see Fig. 1, ref. 17 and 20); and a mounting unit adjustably attachable to the vertical drive unit, and adapted to deploy the imaging panel from a vertical position to a horizontal position (see Fig. 1, 3, and 4, ref. 22, 30, and 32).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 5-6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (US 5,754,622) in view of Smith et al. (US 6,282,264 B1).

Referring to claim 1, Hughes discloses a portal imaging device positioning apparatus attachable to a radiation therapy device gantry, comprising a support attachable to the gantry (see Fig. 1, ref. 6); and a portal imaging device attachable to the support (see Fig. 1, ref. 90). However, the reference does not disclose the device comprising a vertically-adjustable portal imaging device positioner operable in a first mode and a second mode, wherein in the first mode the portal imaging device positioner maintains an imaging panel in position to receive radiation passing through a body maintained in a patient plane, and wherein the second mode portal

imaging device positioner maintains the image panel to receive radiation substantially at the patient plane.

Smith et al. disclose a device comprising a vertically adjustable portal imaging device positioner attachable to a support (see Fig. 1, ref. 16, 10, 34) operable in a first mode and a second mode (see col. 8, lines 25-48), wherein in the first mode the portal device positioner maintains an imaging panel in position to receive radiation passing through a body maintained in a patient plane (see Fig. 3, ref. 34), and wherein in the second mode portal imaging device positioner maintains the image panel to receive radiation substantially at the patient plane (see Fig. 4, ref. 34).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a vertically-adjustable portal imaging device positioner operable in a first mode and a second mode, wherein in the first mode the portal imaging device positioner maintains an imaging panel in position to receive radiation passing through a body maintained in a patient plane, and wherein the second mode portal imaging device positioner maintains the image panel to receive radiation substantially at the patient plane since one would be motivated to improve the versatility of the device. According to Smith et al., such a modification provides a "safe, reliable, convenient and effective way to position such systems for a wide variety of imaging protocols..." (see col. 2, lines 50-55).

Referring to claim 5, Hughes discloses a method comprising an imaging panel operably secured to a radiation therapy device gantry (see Fig. 1). However, the reference does not disclose adjusting the image panel from a first position in a first mode below a patient plane to a second position in a second mode at a patient plane.

Smith et al. discloses a method comprising adjusting an image panel from a first position in a first mode below a patient plane to a second position in a second mode at a patient plane (see col. 8, lines 25-48; Fig. 3 and 4, ref. 34).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust the image panel from a first position in a first mode below a patient plane to a second position in a second mode at a patient plane since one would be motivated to improve the versatility of the device. According to Smith et al., such a modification provides a "safe, reliable, convenient and effective way to position such systems for a wide variety of imaging protocols..." (see col. 2, lines 50-55).

Referring to claim 13, Hughes discloses a portal imaging device method comprising a support attachable at a first end to at treatment gantry (see Fig. 1, ref. 6). However, the reference does not disclose providing a vertically-adjustable portal imaging device positioner, the portal imaging device positioner operable in a first mode and a second mode, wherein in the first mode the portal imaging device positioner maintains an imaging panel in position to receive radiation through a body maintained in a patient plane, and wherein in the second mode portal imaging device positioner maintains the imaging panel to receive radiation at the patient plane.

Smith et al. discloses a device comprising a vertically-adjustable portal imaging device positioner, the portal imaging device positioner operable in a first mode and a second mode, wherein in the first mode the portal imaging device positioner maintains an imaging panel in position to receive radiation through a body maintained in a patient plane, and wherein in the second mode portal imaging device positioner maintains the panel to receive radiation at the patient plane (see Fig. 3 and 4, ref. 34; col. 8, lines 25-48).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a vertically-adjustable portal imaging device positioner, the portal imaging device positioner operable in a first mode and a second mode, wherein in the first mode the portal imaging device positioner maintains an imaging panel in position to receive radiation through a body maintained in a patient plane, and wherein in the second mode portal imaging device positioner maintains the panel to receive radiation at the patient plane since one would be motivated to improve the versatility of the device. According to Smith et al., such a modification provides a "safe, reliable, convenient and effective way to position such systems for a wide variety of imaging protocols..." (see col. 2, lines 50-55).

Referring to claims 2 and 14, Hughes and Smith et al. disclose the device previously recited. However, Hughes does not disclose the device and means including a vertical drive unit adjustably attachable at a mounting cavity to the support; and a mounting unit adjustably attachable to the vertical drive unit, and adapted to deploy the imaging panel from a vertical position to a horizontal position.

Smith et al. disclose a device including a vertical drive unit adjustably attachable at a mounting cavity to the support (see Fig. 1, ref. 17; col. 5, lines 26-41); and a mounting unit assembly adjustably attachable to the vertical drive unit (see Fig. 1, ref. 22, 30 and 32), and adapted to deploy the imaging panel from a vertical position to a horizontal position (see Fig. 1 and 3, ref. 30; col. 5, lines 48-64; col. 3, lines 6-30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a vertical drive unit adjustably attachable at a mounting cavity to the support; and a mounting unit adjustably attachable to the vertical drive unit, and adapted to

deploy the imaging panel from a vertical position to a horizontal position since one would be motivated to improve the versatility of the device. According to Smith et al., such a modification would enable a variety of x-ray protocols, while necessitating the use of only one detector (see col. 2, lines 58-67).

Referring to claim 6, Hughes and Smith et al. disclose the method previously recited. However, Hughes does not disclose temporarily securing a vertically positioned imaging panel to a support; temporarily unsecuring a main drive assembly from the support; adjusting the main drive assembly to the second position; re-securing the main drive assembly; and unsecuring the vertically positioned imaging panel.

Smith et al. discloses a method of securing a vertically positioned imaging to a support (see Fig. 2, ref. 34, ref. 16 and 20), temporarily unsecuring a main drive assembly from the support; adjusting the main drive assembly to the second position; re-securing the main drive assembly; and unsecuring the vertically positioned imaging panel (see col. 7, lines 60-66).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to temporarily secure a vertically positioned imaging panel to a support; temporarily unsecure a main drive assembly from the support; adjusting the main drive assembly to the second position; re-securing the main drive assembly; and unsecure the vertically positioned imaging panel since one would be motivated to add controllability to the device. According to Smith et al., such a modification enables an operator to push or release "appropriate buttons at the end of the movement to lock the structure in place for the x-ray procedure (see col. 5, lines 60-66).

Allowable Subject Matter

3. Claims 3-4, 7-8, 11-12 and 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H Kim whose telephone number is (703)305-4791. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (703)305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Richard H Kim
Examiner
Art Unit 2882

RHK
March 11, 2003